

Complete Tree Inventories Help the City of Toronto Attain 2050 Vision!

Toronto's 2050 Vision

- To increase tree canopy from the current 17% to between 30-40% ... but
 - are we replacing trees?
 - are we adding to our tree stock?
 - how many trees do we really have?
 - and how many to we have to plant?

Why does Toronto Need Tree Inventories?

- To know how many trees we have, their health, and location
- To have complete tree inventory data many tree inventories contain only partial data
- To have a foundation for eco-systematic planning
- Toronto can grow a healthy urban forest with the help of its community members
- Toronto needs to have a combination of **complete** ground and satellite data

Tree Inventories Help Communities Know Their Trees

Species

- Monocultures
- Biodiversity

Location

- Ownership Private/Public
- Growing Conditions – soil, sun, water, winds, aspect

Health

- Mortality
- Longevity
- Pest & Disease Control

Species Breakdown of Toronto Trees from UFORE Study says:

50.3% of the trees are "other" or unknown

7.8% are Box Elder, which are soft wood and not recommended by Toronto's Urban Forestry Department

7.2% are Norway Maples an invasive species that invade our ravines and woodlots

9.3% are Ash under threat from Emerald Ash Borer

Predict & Prioritize

- Plan systematic arboricultural work
- Deal with hazards prior to damage
- Spot insects and disease sooner
- Order trees based on tree inventory to maximize biodiversity
- Help local nurseries grow the native trees we need from local seed stock

Complete Ground/Satellite Data

- Accurate information and location on every tree
- Tree Inventory adds data to Urban Forestry “One Address Repository” and UFORE study
- Tree gaps inventoried show where to plant new trees – Right Tree Right Place
- Tree Inventory gives complete tree mortality data

Benefits & Value of Trees

- Improve Air Quality
- Heat Island Amelioration
- Property Value
- Aesthetics
- Storm Water Attenuation
- Energy Conservation
- Noise Attenuation
- Wildlife Habitat
- Physical & Psychological Well-being

Toronto's Current Urban Forest

- Approximately 7,500,000 trees
- Complete data on only about 1M
- 900,000 Mg of Carbon stored
- 1,500 Mg of other air pollutants and particulate matter removed
- \$8.5M value

Tree Inventories Reveal Monocultures

- **Elms** wiped out by Dutch Elm Disease
- **Ash** decimated by Emerald Ash Borer
- **Butternut** devastated by exotic fungus
- **American Chestnut** eradicated from Eastern forests
- **Maples** favoured host for Asian Long Horn Beetle
- **Silver Maples'** brittle wood downed by high winds

Trees are **Vulnerable** and **Replacement Expensive**

It takes 25 years for a tree to grow a mature canopy with maximum leaf area density

Biodiversity Remediates Loss

- Biodiversity is the foundation of a resilient urban forest
- Opt for native stock where possible
- Support local growers and the use of local seed banks
- Use exotics for only the harshest of urban street conditions
- Tree Inventories are the basis for an eco-systematic approach to planting
- Community Eyes on the Ground will reduce damage from disease and insects
- This helps to reduce the use of insecticides/fungicides
- Wildlife flourishes in native tree habitats because they have a coevolved
- A biodiverse urban forest withstands increasingly high winds

Community Volunteers

- We make our largest economic investment in our neighbourhoods
- We want to be proud of where they live and invest
- We can help to increase the survival of newly planted trees
- We can be educated about the need for biodiversity and the benefits of trees
- We can improve our well-being and health surrounded by a healthy urban forest
- We can increase our societal identity and cohesion by working together
- We care about our neighbourhoods' environmental aesthetics
- We are your most valuable resource!

The End of Presentation

Thank you Councillors Michelle Berardinetti, Raymond Cho, Norman Kelly, Mary-Margaret McMahon, Ron Moeser, James Pasternak and Secretariat Contact Dela Ting for the opportunity to speak to you today about Urban Nature Consultants' mission which is dedicated to the restoration of urban vegetation.

Who Is Urban Nature Consultants?

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